



Knowledge Management and Job Performance: The Case of Lebanese Banking Sector

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ABSTRACT

This study examines the impact of knowledge management on the job performance of Lebanese banking sector during 2019. The research employed knowledge acquisition, knowledge sharing, knowledge creation, knowledge codification and knowledge retention as proxies to analyze the knowledge management variable. The job performance is measured by considering quantitative and qualitative variables. The research reveals that knowledge acquisition, knowledge sharing, knowledge creation and knowledge retention have a positive impact on the job performance of the Lebanese banking sector. The result also reveals a non significant impact of knowledge codification on the job performance. The knowledge management should be as a mandatory condition in banking sector for making high level of job performance.

Keywords: Knowledge Management, Job Performance, Banking Sector, Technology, Knowledge Retention

JEL Classifications: M1, M12, D8

1. INTRODUCTION

As the financial organizations became larger, the number of customers and employees increases, and the database related to each of them increases as well. Here the challenge appears on how to customized each customer and manage his data? On how to manage and use employees' database? and, on how this database management process can affect the employee and customer behavior in banking sector?

Nowadays, banking sector delivery relies heavily on database, knowledge and financial evidences. Moreover, delivering of financial services in banking sector is based on the cooperation of several partners that need to exchange their knowledge in order to provide quality of services. For Malhotra, (2002), knowledge plays essential role on managing organizations and it helps managers make essential decisions and enable knowledge exchange for e-business communities. The author considers that

knowledge management is the key success for making continuous improvement for any organizational unit.

Knowledge management has become a main strategy for banking sector to sustain its growth and development. The development of efficient knowledge management system helps the financial organizations to maintain their competitive advantage through leveraging intellectual capital or knowledge residing in the mind of organizational workforce.

With the fast changes in technology and the development of the internet and virtual technology, knowledge management became more important for banking sector to be more organized in order to achieve high level of job performance, customer satisfaction and quality of financial service.

The challenge that encounters each employee in banking sector is to manage and create knowledge, and how to refer to managers

or supervisor in order to collect, share and use data. Therefore, applying an efficient knowledge management process and system is very important for the commercial and financial performance of Lebanese banking sector.

After the new requirements of central bank and after the requirements of the ministry of finance and the ministry of workforce in Lebanon, in which all data of each employee and customers should be lifelong saved, the topic of knowledge management requires a lot attention from both academicians and practitioners. The challenge here is to know what is the impact of efficient knowledge management system on the employees' performance of the Lebanese banking sector?

To examine the importance of knowledge management process in the case of Lebanese banking sector, this study has the objective to examine how the practices of knowledge management system can influence the job performance of employees.

This research has a significant importance for the Lebanese banking sector, it shows if the knowledge management processes in bank units can help the workforce to create knowledge-intensive environments to establish shared understanding and derive value from knowledge.

The rest of this study is organized as follows: The first section reviews the knowledge management literature and the impact of knowledge management on employees' performance. Section two presents the data and methodology used in this research. Finally, the last section analyzes the results. The paper closes with some concluding comments.

2. LITERATURE REVIEW

2.1. Knowledge Management

The twenty-first century is characterized by the development of the importance of knowledge in banking sector and its impact on all aspects of customer service. The importance of knowledge management system has grown in Lebanese banking sector along with the advances in computers, networks, and data management systems. Sharing and collaboration among thousands of people scattered around the globe depends on the technology of connection and the organized storage of content. Many knowledge projects have focused on building systems to connect people and capture knowledge. Nowadays, implementing knowledge management strategies is effectively seen as a mandatory condition of success for organizations (Davenport and Beck, 2002).

Knowledge management refers to identifying and leveraging the collective knowledge in any organization to make the organization more competitive (Von Krogh, 1998). Typically, Knowledge Management is seen as a knowledge processes with infrastructures, capabilities and management activities that support and enhance the knowledge processes (Lee and Choi, 2003; Gold et al., 2001).

Knowledge management is a discipline and function in which knowledge is created, acquired, shared, codified, and utilized through an enabling environment to increase innovation and

organizational performance (Andreeva and Kianto, 2011; Hajir et al., 2015; Zack et al., 2009). For Andreeva and Kianto (2011), there are two main components of knowledge management. The first one is the knowledge management environment and the second one is the knowledge management processes. The most important component is knowledge management process which creates knowledge and survives irrespective of formal organizational support for knowledge management (Andreeva and Kianto, 2011).

To achieve the study objective, this research considers that knowledge management process is divided into five main functions: knowledge acquisition, knowledge sharing, knowledge creation, knowledge codification and knowledge retention.

2.1.1. Knowledge acquisition

The management of knowledge is a dynamic process. This implies that it is not merely an act but rather involves a sequence of activities that begin with knowledge acquisition. For Alavi and Leidner (2001), the knowledge acquisition process is focused on the application of know-how, forming, mobilizing and dispensing knowledge practices. Accordingly, for Meihami and Meihami (2014), the management of knowledge requires the construction and management of data. This entails knowledge being well-organized to simplify access to information. Knowledge is a valuable resource for organizations and yet its acquisition is one of the most significant issues that managers have to face in very dynamic environment.

The difficulty may not be unrelated to the fact that knowledge is an intangible resource and therefore, difficult to quantify and store as an asset. Consequently, the provision of resources for the acquisition and management of knowledge cannot be easily proffered, and may not be an attractive prospect for those who manage organizations. Nonetheless, perhaps the practice of knowledge acquisition and management needs to be taken more seriously since Meihami and Meihami (2014) posit that organizations can increase their operational effectiveness and efficiency with well-organized and distributed knowledge. Therefore, managers should create ideal conditions within the given context to drive and optimize the establishment of knowledge acquisition and sharing initiatives (Donate and de Pablo, 2015). Because it helps workers in knowledge-intensive environments to establish shared understanding and derive value from knowledge (Mohrman et al., 2002). More precisely, knowledge acquisition in banking sector may improve job performance because it involves access to new knowledge that improves efficiency in carrying out one's tasks.

There are proposals from various researchers on the methods and agents of knowledge acquisition in organizations, for example, knowledge acquisition can be accomplished during socialization (Nonaka et al., 2000); through mentorship and the utilization of teams (Mitchell et al., 2009); by using skilled facilitators to encourage open conversations and deliberations as well as to extract vital knowledge (Fong et al., 2007); by cooperation (Yang and Chen, 2007); through porous organizational boundaries and contingent work (Gold et al., 2001).

An organization's knowledge management structure is intended to be multi-dimensional. On the one hand, organizational structures

should encourage rather than inhibit interaction among employees, which is critical for the acquisition of knowledge (Kim et al., 2014). On the other hand, the structures should be flexible enough to allow the organization and employees to adapt to the ever-changing in banking sector. This is possibly why organizations explicitly utilize knowledge management structures to facilitate knowledge acquisition (Wang et al., 2014).

Taking into consideration the literature review, the first hypothesis of the study can be defined as follow: (H₁) Knowledge acquisition has a positive impact on job performance.

2.1.2. Knowledge sharing

Tacit knowledge is embedded in human experiences and shared in social interaction. Although some tacit knowledge may be codified, much will remain tacit. As the only way to share it is in face-to-face interaction (Nonaka and Takeuchi, 1995), knowledge sharing is the key for managing tacit knowledge. Therefore, organizations should encourage frequent face-to-face communication and the creation of shared learning experiences, as well as build a knowledge-sharing culture (Nonaka and Takeuchi, 1995; Carpenter and Rudge, 2003; Dalkir, 2005). For instance, explicit knowledge would be easier to share than implicit/tacit knowledge. Knowledge-sharing activities include informal communication, brainstorming sessions, mentoring and coaching (Filius et al., 2000).

Nowadays, knowledge becomes a source of competitive advantage when it is shared among employees (Sveiby, 2001). Knowledge sharing is a key element of knowledge management which plays a vital role in the learning and development of individuals working in organizations by donating and collecting their information, experience and knowledge (Bock and Kim, 2002; Lichtenthaler and Ernst, 2006). Knowledge sharing occurs when a knowledgeable worker supports his/her coworker by developing new capabilities and experience.

The ultimate objective of Knowledge sharing is to transfer the knowledge of organizational resources and assets among the employees (Dawson, 2000) providing organizations with a sustainable competitive advantage in the highly competitive economy (Wang and Noe, 2010). Knowledge sharing involves two parties. One is called knowledge supplier and the other is knowledge demander (Javadpour and Samiei, 2017). These are also known as knowledge source and knowledge receiver or knowledge carrier and knowledge requester.

For knowledge sharing, both the parties should be willing to send or receive knowledge. If one party is hesitant to share knowledge, the other will suffer and ultimately team, department and organization will suffer too. Thus, organizations should encourage their employees to share and receive new knowledge for overall development (Rehman et al., 2014). Empirical evidences revealed that there were a number of antecedents of knowledge sharing behavior. Ipe (2003) categorized them into four main groups, namely, the nature of knowledge, motivation to share, opportunity to share and the culture of the work environment.

Concerning the motivation to share knowledge, empirical studies have identified the factors stimulating knowledge sharing which

were enjoyment, helping others and self-efficacy. However, motivation to share knowledge is subjected to the availability of opportunity to do so.

Cabrera et al. (2006) explored that information and communications technology in the form of electronic knowledge repositories were being used to facilitate knowledge sharing. The culture of the work environment plays an important role such as communication climate and organizational justice affect knowledge sharing (Kim and Lee, 2006).

Therefore, it is important that organizational structures are designed such that they are flexible, encourage sharing and collaboration across organizational boundaries and especially in financial sector (Schoenherr et al., 2014). Rational reasoning may suggest that this position should also be applicable to project-focused organizations, because the sharing of knowledge and other resources may potentially contribute towards improved job performance.

Taking into consideration the literature review, the second hypothesis of the study can be defined as follow: (H₂) Knowledge sharing has a positive impact on job performance.

2.1.3. Knowledge creation

Knowledge creation refers to the organization's ability to develop new and useful ideas and solutions regarding various aspects of organizational activities, from products and technological processes to managerial practices (Kianto and Andreeva, 2011). Knowledge creation is a key factor in enabling sustained performance in turbulent environments (Eisenhardt and Martin, 2000).

Knowledge is created when an organization and its members learn, innovate and improve a skill or knowledge. According to Scharmer (2001), knowledge creating is used for the development of employee potential at all levels of the organization.

Knowledge creation represents the process of enabling people to create new insights such as eureka moments or alternative views on existing knowledge (Brix, 2014). This process can be executed deliberately and mindfully by following concrete methodologies and creative processes with goal-driven (Kao et al., 2011). When people become aware of the new or altered knowledge, they can start codifying and developing it to be less uncertain and more structured (O'Connor and Rice, 2013). This process enables the knowledge to be placed into organizational repositories, and therefore, it facilitates retention, new alterations and transfer a process that is frequently related to as organizational learning (Argote, 2012).

By considering the literature review, the third hypothesis of this study can be defined as follow: (H₃) Knowledge creation has a positive impact on job performance.

2.1.4. Knowledge codification

Cowan and Foray (1997) define knowledge codification as the process of conversion of knowledge into messages which can

be processed as information. Knowledge codification consists of the activities needed to codify tacit knowledge into explicit form, to store documented knowledge and to provide up-to-date documented knowledge to others in the organization (Filius et al., 2000).

It is based on the availability of appropriate communication and information technology tools, platforms and systems, together with the related employee skills and motivation to use them to make employee knowledge explicit and to codify and store it for use in company systems and documents.

Ideally, employees should be equipped with information technology tools and platforms that facilitate the effective codification and storing of explicit knowledge in databases and manuals, as well as the search and transfer of this knowledge.

When applying the term codification to knowledge, however, knowledge Management commentators such as Davenport and Prusak (1998) appear to gloss over the social dimensions to knowledge codification which follow from the generation, use and interpretation of the codes needed to communicate knowledge. Moreover, the literature on communities of practice suggests that similar knowledge bases and shared histories of learning (Wenger, 1998) link practitioners in informal relationships which, according to Wenger and Snyder (2000), are the best practices across a company to increase the performance of employees.

By considering the literature review, the fourth hypothesis of this study can be defined as follow: (H₄) Knowledge codification facilities has a positive impact on job performance.

2.1.5. Knowledge retention

Knowledge retention is a sub-discipline of knowledge management which deals with cases where expert knowledge workers leave organizations after long periods of time. Knowledge retention, also known as knowledge continuity, deals with challenges on which classic, well known knowledge management methodologies do not focus. Most knowledge management methodologies concentrate on knowledge subjects, and not on specific people (Dalkir, 2005).

Kianto et al. (2016) defines knowledge retention as an activities related to overseeing employee turnover and the related loss of expert knowledge which refer a key organization asset. Expert knowledge can be lost when employees leave the organization for some reason.

People leave for many reasons (career, cut-offs, etc.), however retirement of employees is one of the most reasons here. This situation deals with those who, in most cases, are ceasing to work permanently. Two main characteristics distinguish this type of leaving: Many of those retiring (at least nowadays) have spent many years in the same organization and some even in the same job. There is thus a vast amount of knowledge to be transferred; and, dealing with knowledge retention is usually the first significant act symbolizing the change these people are to experience. Many are afraid of the change, thus complicating the process and making the integration of emotional aspects necessary

for success in knowledge transfer. Although it is considered crucial for long term organizational performance, few organizations have formal knowledge retention strategies (Liebowitz, 2011).

Knowledge retention involves capturing knowledge in the organization so that it can be used later. In reality, knowledge retention should be integrated into how the organization operates and start well before a key employee is about to depart.

Long term classic knowledge management solutions focus on an enduring structured environment, where people are encouraged to share their ongoing knowledge, whether in the form of written documents via portals and knowledge bases, or thoughts via forums/discussion groups (Choo, 1996). Knowledge retention tackles a different situation: In a limited period of time, an expert’s most valuable knowledge has to become an organizational asset.

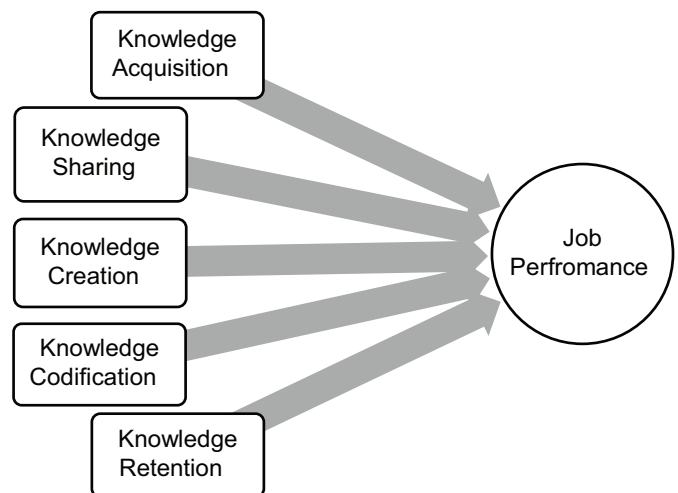
Taking into consideration the literature review, the second hypothesis of the study can be defined as follow: (H₃) Knowledge retention has a positive impact on job performance.

3. SAMPLE, METHODOLOGY AND VARIABLES DEFINITION

The population of this study consists of all the employees that work in the Lebanese banking sector. The questionnaire was distributed to 12 banks in 2019 after getting the acceptance from the administration of each bank. In total 1345 email were sent to the targeted population. Only 246 employees have filled the questionnaire and replied their answers by email. 11 replied email with uncompleted answers was eliminated from the study. The final sample of this study is consists of 235 employees at all administrative levels of banking sector.

The model of this study is shown in Figure 1. Based on the study objective the dependent variable in this research is the job performance of employees in the Lebanese banking sector. The independent variable is the knowledge management which is divided into 5 independent variables: Knowledge acquisition,

Figure 1: Model of the study



knowledge sharing, knowledge creation, knowledge codification and knowledge retention.

The dependent variable in this study is the job performance. This variable reveals the overall performance of employees in banking sector. This variable is measured by using 10 quantitative and qualitative statements based on 5 point Likert scale.

The first independent variable is the knowledge acquisition. This variable examines the importance and fluency of knowledge acquired from extra-organizational sources (Cohen and Levinthal, 1990; Zahra and George, 2002; Darroch, 2005). Knowledge acquisition is measured in this study by using 5 statements based on 5 point Likert scale.

The second independent variable is the knowledge sharing. This variable reveals the level of knowledge flows inside the organization. (Rehman et al., 2014). In this study, it is measured by using 10 statements based on 5 point Likert scale.

The Knowledge creation is the third independent variable in this study. It reveals the frequency and the basis of a new idea development in different groups of activities (Brix et al., 2014) and it is measured by using 10 statements based on 5 point Likert scale.

The fourth independent variable is the knowledge codification. This variable identifies the quantity of storage and documentation and the scope of knowledge sources (Filius et al., 2000). Knowledge codification is measured in this study by using 10 statements based on 5 point Likert scale.

The final independent variable is the knowledge retention. This variable measures the continuity and the preservation of knowledge within the organization (Liebowitz, 2011). It is measured by using 5 statements based on 5 point Likert scale.

4. RESULTS AND DISCUSSION

4.1. Descriptive Statistics, Reliability and Correlation Test

The results presented in Table 1 indicates that the majority of respondents from the Lebanese Banking sector are married (54%). The women have the majority percentage of the study's sample (62%). The majority of respondents have <45 years old (67%). And, the ultimate majority has a BA degree (65%). This sample reflects the characteristics of population that works in the Lebanese banking sector in 2019.

The results in Table 2 measures the reliability and consistency of the distributed questionnaire by using the Cronbach Alpha coefficient. Testing the reliability is important as it refers to the consistency across the components of a measuring instrument (Huck, 2007). A scale is characterized by high internal consistency and reliability if its items hang together to measure the same construct (Huck, 2007; Robinson, 2009).

Table 2 indicates that the Cronbach's Alpha coefficients for the dependent and independent variables in this study are ranged

between 0.954 and 0.981. Therefore, the reliability among the used items in each scale is consistent.

Table 3 shows the Spearman correlation results between the different used variables in this study. The results in Table 3 show that the relationship between knowledge acquisition and job performance is positive and significant at 1% significance level (coefficient = 0.517, $P = 0.000$). Moreover, the relationship between knowledge retention and job performance is positive with 1% as significance level (coefficient = 0.629, $P = 0.000$). However, the results do not reveal any significant relationship between knowledge codification and job performance (coefficient = 0.622, $P = 0.231$). The same result is revealed between knowledge sharing and job performance. Finally, the results reveal a negative and non significant relationship between knowledge creation and job performance (coefficient = -0.163, $P = 0.012$). These results have to be more explored through the regression analysis.

4.2. Regression Results

The multiple regression analysis is used to test the hypotheses of the study and determine the relationship between the dependent variable (Job performance) and the independent variables (Knowledge management functions).

The results in Table 4 represent the impact of the independents variables (knowledge acquisition, knowledge sharing, knowledge creation, knowledge codification and knowledge retention) on the dependent variable (Job Performance) in the Lebanese banking sector during 2019.

The results show that the knowledge acquisition has a positive (0.321) and significant impact on job performance in banking sector. By improving the understanding and the establishment of

Table 1: Descriptive statistics of the sample

Demographic	Percentage
Gender	
Male	38
Female	62
Age	
18-24 years old	12
25-44 years old	55
45-64 years old	33
Marital status	
Single	46
Married	54
Educational level	
Less than high school	1
High school diploma or equivalent	14
Bachelor degree	65
Master degree	20

Table 2: Cronbach's alpha coefficient

Variables	Numbers of items	Cronbach's alpha
Knowledge acquisition	5	0.981
Knowledge sharing	10	0.964
Knowledge creation	10	0.961
Knowledge codification	10	0.983
Knowledge retention	5	0.972
Job performance	10	0.954

Table 3: Spearman correlation

	Knowledge acquisition	Knowledge sharing	Knowledge creation	Knowledge codification	Knowledge retention	Job performance
Knowledge acquisition						
Correlation coefficient	1.000	0.133	-0.142	0.714**	0.667**	0.517**
Sig. (2-tailed)		0.091	0.060	0.000	0.000	0.000
N		235	235	235	235	235
Knowledge sharing						
Correlation coefficient		1.000	-0.014	0.151	0.122	0.152
Sig. (2-tailed)			0.912	0.257	0.216	0.223
N			235	235	235	235
Knowledge creation						
Correlation coefficient			1.000	-0.131	-0.032	-0.163*
Sig. (2-tailed)				0.274	0.733	0.012
N				235	235	235
Knowledge codification						
Correlation coefficient				1.000	0.686**	0.622
Sig. (2-tailed)					0.000	0.231
N					235	235
Knowledge retention						
Correlation coefficient					1.000	0.629**
Sig. (2-tailed)						0.000
N						235
Job performance						
Correlation coefficient						1.000
Sig. (2-tailed)						
N						

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed)

Table 4: Regression results

Model	Unstandardized coefficients		Standardized coefficients	T	Sig.	Collinearity statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	1.64	0.552		3.766	0.000		
Knowledge acquisition	0.542	0.199	0.321	1.132	0.001	0.250	3.000
Knowledge sharing	0.049	0.095	0.131	0.621	0.000	0.968	1.411
Knowledge creation	0.247	0.090	0.171	2.179	0.000	0.954	1.073
Knowledge codification	0.771	0.208	0.623	2.876	0.451	0.225	3.218
Knowledge retention	0.499	0.112	0.455	3.110	0.000	0.528	2.093

(a) Dependent variable: Job performance, (b) Predictors: (Constant), Knowledge retention, Knowledge creation, Knowledge sharing, Knowledge acquisition, Knowledge codification

knowledge, the employees can increase their capacities to perform their jobs in banking sector. Therefore, the first hypothesis in which Knowledge acquisition has a positive impact on job performance is accepted.

Sharing the knowledge also has a positive impact on the job performance in banking sector. The results in Table 4 reveals a positive (0.131) and significant impact of knowledge sharing on the job performance. Therefore, it is important for banking sector to encourage the sharing of knowledge in order to increase the performance of employees. This result indicates that the second hypothesis in which Knowledge sharing has a positive impact on job performance is accepted.

The results in Table 4 shows that the knowledge creation has a positive (0.171) and significant impact on the job performance of employees that work in banking sector. By developing new useful ideas and knowledge the banking sector can sustain and develop its performance in dynamic environment characterized by high level of competition. Consequently, the third hypothesis in which Knowledge creation has a positive impact on job performance is accepted.

Between the knowledge management functions, knowledge retention has the highest impact on the job performance in Lebanese banking sector. The results reveal a positive (0.455) and significant impact of knowledge retention on the job performance. This result shows that knowledge retention should be well integrated in banking sector that is characterized by high level of turnover. Therefore, the fifth hypothesis in which Knowledge retention has a positive impact on job performance is accepted.

Finally, the results in Table 4 reveal the absence of any significant impact of knowledge codification on the job performance of employees in banking sector. The fourth hypothesis in which Knowledge codification has a positive impact on job performance is not accepted.

5. CONCLUSION

This research studied the impact of knowledge management on the job performance in the Lebanese banking sector during 2019. In this study, the knowledge management was divided into five dimensions: knowledge acquisition, knowledge sharing,

knowledge creation, knowledge codification and knowledge retention.

The research gives evidence of significant and positive impact of knowledge acquisition, knowledge sharing, knowledge creation and knowledge retention on the job performance of the Lebanese banking sector. According to the results, the knowledge retention has the highest impact on the job performance while knowledge sharing has the lowest impact on the job performance. Moreover, the results reveal a non significant impact of knowledge codification on the job performance.

The knowledge management process and functions must be well integrated in banking organizations to promote job performance. This result comes in line with the studies of Zack et al. (2009) and Andreeva and Kianto, (2012) who showed that knowledge management is an important driver for value creation, competitiveness and success.

In this study there are many limitations that must be considered in future research. The first limitation is related to the sample size. The number of respondents is considered very limited and need to be larger. The demographic factors of respondents are not considered which may bias the results of the study. So the demographic factors have to be considered in future research. In this study the sample was extracted from Islamic, commercial and investment banks. Therefore, the different type, culture and work environment of banking sector have to be considered in the future research.

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